

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) An image processing system for searching images on a network, the image processing system comprising:
 - (a) a search engine;
 - (b) an image analyzer coupled to said search engine, said image analyzer for comparing first and second images provided thereto from said search engine, wherein:
 - the first image is associated with a first code associated with a first predetermined textual annotation,
 - the second image is associated with a second code associated with a second predetermined textual annotation,
 - the first code is descriptive of at least a region of the first image,
 - the second code is descriptive of at least a region of the second image, and
 - the image analyzer uses image analysis of the first and second images along with a comparison of the first and second codes in determining if the first and second images are likely to compare favorably.
2. (Previously Presented) The system of Claim 1 further comprising an input system coupled to one of said search engine and said image analyzer, said input system comprising at least one of: a graphical user interface; a facsimile system; a camera system; a scanner; a network connection; and a video system.

3. (Previously Presented) The system of Claim 21 wherein the matching algorithm defines at least one particular region of an image and at least one particular measurement to make on pixels within each of the at least one particular image region.

4. (Previously Presented) The system of Claim 3 wherein the matching algorithm defines at least one measurement to make on one or more pixels in an image region neighboring the one particular image region.

5. (Previously Presented) The system of Claim 1 further comprising a storage device having at least one image stored therein coupled to at least one of said a-search engine and said image analyzer.

6. - 20. (Canceled)

21. (Previously Presented) The system of Claim 1 wherein said image analyzer is provided information specific to a particular application to modify a matching algorithm used in determining if the first and second images compare favorably.

22. (Previously Presented) An image processing system for processing images stored on a network, the image processing system comprising:

a search engine coupled to the network;

an image analyzer coupled to said search engine, wherein:

the first image is associated with a first code,

the second image is associated with a second code,

the first code is descriptive of the first image's content and is determined before matching by the image analyzer,

the second code is descriptive of the second image's content and is determined before matching by the image analyzer, and

the image analyzer automatically analyzes the first and second images and the first and second codes in determining if the first and second images are likely to compare favorably; and

an input system coupled to at least one of said search engine and said image analyzer, wherein the input system is accessible from the Internet.

23. (Previously Presented) The image processing system for processing images stored on the network as recited in claim 22, wherein said image analyzer is provided information specific to a particular application to modify a matching algorithm used in determining if the first and second images compare favorably.

24. (Previously Presented) The image processing system for processing images stored on the network as recited in claim 22, wherein said input system comprising of at least one of: a graphical user interface; a facsimile system; a camera system; a scanner; a network connection; and a video system.

25. - 35. (Canceled)

36. (Previously Presented) The system of Claim 1, wherein the search algorithm is automatically tailored to a subset of possible image factors that can be automatically analyzed, whereby the image analyzer automatically learns which factors are important in matching images.

37. (Previously Presented) The system of Claim 1, wherein:
the second image is part of a plurality of images, which are associated with a plurality of codes,

the image analyzer compares the first code and the plurality of codes to find a subset of the plurality of images that compare favorably, wherein the second image is part of the subset.

38. (Previously Presented) The system of Claim 1 wherein at least one of the first and second predetermined textual annotations is human determined.

39. (Previously Presented) The image processing system for processing images stored on the network as recited in claim 22, wherein the first code is textual and derived with manual determination.

40. - 42. (Canceled)

43. (New) An image processing engine for search and retrieval of images, the image processing engine comprising:

an output interface;

an input interface, wherein the input interface accepts selection of a plurality of images to use in a search query;

a plurality of target images; and

an image processing system, wherein:

the image processing system uses the plurality of images in the search query, and

the image processing system determines a subset of the plurality of target images that are similar to the plurality of images.

44. (New) The image processing engine for search and retrieval of images as recited in claim 43, wherein the image processing system combines the plurality of images into a composite image used in the search query.

45. (New) The image processing engine for search and retrieval of images as recited in claim 43, wherein the input interface receives selection of a region to be emphasized in the search query.

46. (New) The image processing engine for search and retrieval of images as recited in claim 43, wherein the plurality of images include at least one positive example image that typifies what should be found with the search query.

47. (New) The image processing engine for search and retrieval of images as recited in claim 43, wherein the plurality of images include at least one negative example image that typifies what should not be found with the search query.

48. (New) The image processing engine for search and retrieval of images as recited in claim 43, wherein the image processing system learns over time parameters for best determining the subset.

49. (New) The image processing engine for search and retrieval of images as recited in claim 43, wherein the image processing system scales at least a portion of one of the plurality of images and the plurality of target images to a similar scale.

50. (New) A method search and retrieval of images, the method comprising steps of:

receiving selection of a first image for use in a first search query;

performing the first search query to determine a first plurality of images selected from a plurality of target images;

presenting a first listing of the first plurality of images from the first search query;

receiving selection of a second image chosen from the first plurality of images;

performing a second search query to determine a second plurality of images selected from the plurality of target images, wherein the second search query is a function of the second image; and

presenting a second listing of the second plurality of images from the second search query, wherein the first and second plurality of images are different.

51. (New) The method search and retrieval of images as recited in claim 50, further comprising a step of combining the first and second images for the second search query.

52. (New) The method search and retrieval of images as recited in claim 50, further comprising steps of:

analyzing the first or second listing to determine if the first or second listing meets a criteria; and

presenting a result from the analyzing step.

53. (New) A method for search and retrieval of images, the method comprising steps of:

receiving selection of a two or more images for use in a search query;

processing the two or more images to produce a subset of information to use in the search query;

retrieving a plurality of target images;

comparing the subset of information against the plurality of target images to determine a subset of the target images; and

presenting the subset as a result from the search query.

54. (New) The method for search and retrieval of images as recited in claim 53, wherein the subset is limited to one from the plurality of target images.

55. (New) The method for search and retrieval of images as recited in claim 53, the processing step comprises a sub-step of combining the two or more images into the subset of information.

56. (New) The method for search and retrieval of images as recited in claim 53, wherein the processing step comprises sub-steps:

receiving selection of a region from the two or more images, and

emphasizing the region in the search query.

57. (New) The method for search and retrieval of images as recited in claim 53, wherein common characteristics from the two or more images are used to create a condensed query image used in the search query.

58. (New) The method for search and retrieval of images as recited in claim 53, wherein the presenting step includes a step of presenting images corresponding to the subset.

59. (New) The method for search and retrieval of images as recited in claim 53, further comprising steps of:

- analyzing the subset to determine if the subset meets a criteria; and
- presenting a result from the analyzing step to a user.

60. (New) A method for comparing two digital images, the method comprising steps of:

- extracting a region of a selected image;
- processing the region;
- providing a target image from a plurality of target images, wherein the region is smaller than the target image;
- comparing the region to a plurality of regions in the target image; and
- matching the region to a target region from the plurality of regions in the target image.

61. (New) The method for comparing two digital images as recited in claim 60, further comprising a step of intelligently dividing the target image into a plurality of regions according to an attribute of each of the plurality of regions.

62. (New) The method for comparing two digital images as recited in claim 60, further comprising a step of determining neighboring regions to the region that are defined by their proximity to the region.

63. (New) The method for comparing two digital images as recited in claim 62, further comprising a step of retrieving a factor indicative of how important neighboring regions are in matching for a particular application.

64. (New) The method for comparing two digital images as recited in claim 62, further comprising steps of:

deforming a location of the neighboring regions with respect to the region in determining a deformation factor; and

using the deformation factor in determining a likelihood of a match between the image and the target image.

65. (New) The method for comparing two digital images as recited in claim 60, further comprising steps of:

determining a location difference between the region and a target region; and
modifying a score indicative of a match according to the location difference.

66. (New) The method for comparing two digital images as recited in claim 60, further comprising steps of:

determining a scale difference between the region and a target region; and
modifying a score indicative of a match according to the scale difference.

67. (New) The method for comparing two digital images as recited in claim 60, further comprising steps of:

determining a first property of the region;
determining a second property of a target region;
determining a difference between the first and second properties; and
modifying a score in relation to the difference.

68. (New) The method for comparing two digital images as recited in claim 60, further comprising steps of:

- determining a first property of a first region of the selected image;
- determining a second property of a second region of the selected image;
- determining a third property of a third region of the target image;
- determining a fourth property of a fourth region of the target image, wherein the first, second, third, and fourth properties are like properties;
- determining a first difference between the first and second properties;
- determining a second difference between the third and fourth properties; and
- modifying a score in relation to the first and second differences, wherein the score is indicative of a likelihood that the selected image and the target image match.